Annual Report
Grant No. 12-25-B-0852
Specialty Crops Block Grant Program
Wisconsin Department of Agriculture, Trade and Consumer Protection

Report Due Date: June 23, 2012

Ben Brancel
Secretary

Wisconsin Department of Agriculture,
Trade and Consumer Protection
2811 Agriculture Drive
Madison, WI 53718
Phone: (608) 224-5015

Contact for Specialty Crop Block Grant Program

Program Coordinator:

Juli Speck
Grant Specialist
Division of Agricultural Development
Phone: (608) 224-5134
Email: juli.speck@wi.gov

Introduction

The Wisconsin Department of Agriculture received $144,090.73 from the Specialty Crop Block Grant Program, Grant No. 12-25-B-0852. The Department was able to fund five projects to promote specialty crops within Wisconsin while utilizing the University of Wisconsin for many of the research activities.

Enclosed are the final reports submitted by all five grantees. DATCP is pleased with the results of these projects and appreciates the opportunity to fund them.

Grant Projects:

1) Integrated Pest Management Strategic Plan for Christmas Tree Producers

2) Food Safety Position

3) Survey of viruses occurring on snap beans in Wisconsin

4) Survey for Corky Ringspot Disease of Potatoes in Wisconsin

5) Savor Wisconsin

Grant #: FY08-001

FY08 – SCBG
Annual Progress Report

Grantee: Department of Agriculture, Trade and Consumer Protection

Project Title: Integrated Pest Management Strategic Plan for Christmas Tree Producers

Total Amount Received: $10,000

Date of Award: 4/1/09 – 2/28/12

Project Contacts: Matt Sunseri

I. Project Summary

The department observed that Wisconsin Christmas tree producers face a variety of challenges related to pest management, particularly loss due to insect and fungus problems and lack of professional guidance on these issues. There are numerous existing and emerging pest issues, in addition to a changing pesticide market through the loss, restriction, or addition of products or uses of products. Unlike other crop producers in Wisconsin, this industry does not have faculty/staff at the University of Wisconsin Extension that provide committed research and extension services to this industry, or coordinate the overall industry needs as they relate to pest management including organized informational resources, pesticide registration, product availability, efficacy, and economics. The department observed a similar lack of coordination within the industry group, compared to other crop producers in Wisconsin. The initial purpose of the project was to give the Wisconsin Christmas Tree Producers Association (WCTPA), in addition to non-member producers, a dynamic strategic plan to work from.

II. Project Approach

The department hired an intern to develop and conduct a survey of Wisconsin producers to better understand production practices, to determine the nature of pest management challenges, and to identify producer needs. The department mailed the survey to over 400 licensed Christmas tree producers in Wisconsin and received responses for 157/398 (39.4%) of the successfully delivered surveys. The intern evaluated and summarized the survey responses. The survey results indicated that growers face many different pest challenges and there are few common challenges and needs frequently reported by the industry as a whole. Many producers cited specific problems and needs that others did not. This is likely due to numerous factors including geographical location, tree species, production practices, and pest management practices.

The department conducted a one-day working group meeting that involved producer and Wisconsin Christmas Tree Producer Association (WCTPA) board representatives, University of Wisconsin technical resources, and DATCP Pesticide and Plant Industry staff. The purpose of the meeting was to develop a plan for developing a useful resource for the industry. The

working group focused on developing a web-based collection of pest and pest management information, rather than a comprehensive strategic plan based in part on the survey results and also the needs identified by the working group. The working group concluded that the most beneficial resource for producers would be one that did not duplicate existing resources but rather supplemented resources such as the USDA Forestry Service Christmas Tree Pest Manual, which was last updated in 1998, and/or directed producers to existing information. The working group identified newer insect, mite, and fungus problems that were not included in the USDA manual. Some of the pest problems have limited information available, or the information is scattered across different resources.

DATCP staff developed a new website to assist Wisconsin producers. The website focuses on newer pests – including insects, mites and diseases – for which management information has been difficult to find. To access the information, type in http://datcp.wi.gov/Plants/Christmas_Trees/Christmas_Tree_Pests_and_Diseases or:

- Go to datcp.wi.gov
- Click on the "Plants" button
- Click on "Christmas trees" in the drop-down menu
- Click on "Christmas Tree Pests & Diseases" in the box

When a producer clicks on the plus sign in front of a tree species, a list of pests appears. For each listed pest, the department has provided links to existing information that includes research-based recommendations on prevention and management.

The department notified the working group members of the availability of the web-based resource and mailed an announcment to WCTPA in addition to all Christmas tree producers currently licensed with the department (approximately 400). The department also submitted an announcement for inclusion in a trade publication (Green Side Up) issued by the Wisconsin Green Industry Federation, an organization that includes WCTPA and other state associations related to plants.

III. Goals and Outcomes Achieved:

A. Supply the activities that were completed in order to achieve the performance goals and measurable outcomes for the project.

Hiring and training intern
Conducting a statewide survey of producers
Conducting a 1-day working group meeting
Developing a web-based resource for pest management information
Notifying beneficiaries of the availability of the new resource
*(See Approach for more details on these activities)

B. Provide a comparison of actual accomplishments with the goals

The activities listed in IIIA provided a clearer view of pest management issues as originally intended. The initial plan was to develop an overall pest management strategic plan for the state Christmas tree association that producers could use as a reference. However, based on the outcomes of the statewide survey, an industry conference, and the working group meeting, the

true initial need of producers was the centralization of existing information regarding newer pests rather than a comprehensive plan for the industry. The working group focused specifically on developing a web-based pest management resource for producers to use rather than other strategic plan components originally set as goals (evaluating effective products, cultural control methods, alternative products and management strategies, determination of which pests or combination of pests contribute to overall yield decline, pesticide registration issues that may impede or aid pest control, and potential gaps in research and coordination within the industry). The strategic plan components arose in discussion at the meeting but were not incorporated into a formal document as originally proposed. Wisconsin producers now have a user-friendly centralized location for pest management information that was previously difficult and/or time-consuming to find.

IV. Lessons Learned:

Involving an intern was a highly rewarding endeavor for the intern, department staff, producers, and the quality and completion of the project itself. However, supervising a full-time intern substantially increased the workload of staff. Additionally, the statewide survey required much more of the intern's time than projected and ended up being the main focus of the intern's work. As a result, other department staff completed the remaining parts of the project, which was a challenge over time due to changes in staffing and workloads. The project timeline took longer than originally anticipated.

Both the intern's work and the working group meeting provided department staff with valuable interaction and exchange of information/ideas with producers and other partners that may not have occurred otherwise.

In hindsight, this project plan may have benefited from more initial consultation with potential project partners prior to development. The initial plan was to develop a strategic plan for the state Christmas tree association that producers could use as a reference. However, based on the outcomes of the statewide survey and working group meeting, the true initial need of producers was information regarding newer pests rather than a comprehensive plan for the industry.

V. Outcome Measures:

*See section 3 for outcomes.

The following entities benefit from having a central web-based source of information regarding newer pests:

(1) Wisconsin Christmas tree producers (over 400 producers are licensed with the department):

(a) Board officials and members (approximately 170) of the Wisconsin Christmas Tree Producers Association (WCTPA).

(b) Non-WCTPA members

(2) Wisconsin producers of other trees/plants affected by the web-listed pests

(a) Members of other state associations, other than WCTPA, that are part of the Wisconsin Green Industry Federation.

(b) Non-members

(3) University of Wisconsin entomology/plant pathology/horticulture faculty and staff, as well as county extension agents around the state, will benefit from the consolidation of information related to newer pests that producers may inquire about and may identify opportunities for research and outreach.

(4) DATCP Bureau of Plant Industry; seven (7) nursery inspectors will benefit from the new website as it will help them address producer questions regarding the listed pests.
1. Sample 200 fields: 101 were sampled

VI. Additional Information:

Maps and publications information already included

VII. Project Contact:

Matt Sunseri
DATCP Agricultural Resource Managment
matt.sunseri@wi.gov
608-224-4547

Grant #: FY08-002

FY08 – SCBG
Annual Progress Report

Grantee: Department of Agriculture, Trade and Consumer Protection

Project Title: Food Safety Position

Total Amount Received: $78,897

Date of Award: 4/1/09 – 3/15/12

Project Contacts: Teresa Engel, Economic Development Consultant

I. Project Summary

The overall goal of the Food Safety Project for the Wisconsin Fresh Fruit and Vegetable Industry is "to enhance the competitiveness of specialty crop producers in Wisconsin by assessing the food safety needs of fresh fruit and vegetable producers and by developing best practices to meet the needs identified."

PHASE ONE: The Wisconsin Department of Agriculture, Trade and Consumer Protection contracted with FamilyFarmed.org to perform an analysis and devise recommendations regarding the current state of on-farm food safety within the Wisconsin produce industry. FamilyFarmed.org engaged industry representatives as well as stakeholders to participate in the needs assessment and contribute to overall project content and process. The needs assessment revealed that challenges exist for buyers, growers, distributors, and regulators.

PHASE TWO: The goal of phase two was to provide the resources and tools growers need to implement best food safety practices at their growing operations. DATCP contracted with the Wisconsin Potato and Vegetable Growers Association and the University of Wisconsin-Extension to implement the recommendations created during phase one. Workshops, one-on-one technical assistance, web-tool creation, and a train the trainer series were implemented.

Detailed information from the assessment as well as the web-tool and train the trainer resources can be found here:
http://datcp.wi.gov/OnFarmFoodSafety/index.aspx

II. Project Approach:

PHASE ONE: WI DATCP selected and contracted with FamilyFarmed.org as the consultant to carry out the food safety assessment and food safety program recommendation.

FamilyFarmed.org met with DATCP Adviosry team (Teresa Engel - Buy Local, Buy Wisconsin, Lora Klenke - Bureau Director of Market Development, Steven Ingham - Division Administrator of Food Safety, Jeremy McPherson - Division of Trade and Consumer Protection, Tim Leege-Division of Trade and Consumer Protection-GAP/GHP Program, and Jill Ball - Division of Food Safety) to recruit stakeholder representatives from commerical specialty crop producers, small diversified producers, buyers, and food safety specialists. With these stakeholders, FarmilyFarmed.org created surveys for each of their respective groups. The intent of the survey's was to assess what the needs are of the groups and what type of programs work and don't work in relation to food safety.

1) Survey questions were completed and admisinstered to the industries through constant contact. Outreach was conducted to garner survey responses from the groups as well as follow up phone interviews to gather additional qualitative information.
2) Research was conducted by FamilyFarmed.org's subcontractor Michael Field's Agricultural Institute to assess current and potential changes to federal food safety regulations with guidance from DATCP

PHASE TWO: DATCP solicited applications from individuals, groups, and or organizations that can carryout the recommendations identified from phase one.

Applications were reviewed by stakeholders from the Divison of Ag development, Division of food safety, and Division of Trade and Consumer Protection. Based on the evaluation criteria the group agreed to contract with the WI Potato and Vegetable Growers Association to carry out PHASE TWO of the project.

1) *WORKSHOPS:* Development, implementation, and evaluation of hands-on full day workshops that address the food safety needs of both small and commercial growers. Two workshops were offered to address the training needs of larger growers, and four workshops addressed the needs of smaller growers. The workshops were conducted in partnership with the Buy Local, Buy Wisconsin workshop road show. The locations of the workshops were selected based on grower needs. Areas with high concentration of growers received priority. The workshop locations were geographically spread out throughout Wisconsin to attempt to maximize attendance.

   The attendees targeted for training included:
   - Small growers needing general information about on-farm food safety
   - Small growers needing more in-depth information and assistance in creating an on-farm food safety plan
   - Commercial growers needing to prepare for third-party food safety audits, and/or create HACCP plans

   General food safety training was provided to assist growers understanding and handling of the risks of food-borne illness. This consisted of class-room style training and

workshop environments that will emphasize the role of personal hygiene, chemical handling safety, pest control, and sanitation practices in minimizing the spread of biological, chemical, and foreign matter hazards while growing and handling fresh produce. It included the basic requirements for writing documented procedures to control food-borne hazards, and how to maintain records of compliance with GHP/GAP requirements.

Advanced food safety workshops emphasized the requirements needed by larger organizations seeking to be audited in connection with certification against one or more quality and food safety standards. Organizations involved with this level of certification interest were already acquainted with the requirements for an effective GAP program. This workshop emphasized the advanced topics surrounding the development of programs to ensure the company meets good manufacturing practices as it required by food processors and retailers, and HACCP for ensuring safety of products. Procedural document development, validation, and record structure for compliance with GFSI standards were emphasized.

2) *WEB-TOOL:* Gathering of existing public resources/reference material. The WPVGA (Tim Feit), DATCP team (Teresa Engel and Steve Ingham), and food safety expert Larry Hood worked together to gather food safety information that would be of value to the target grower audience. The overall goal was to provide Wisconsin fresh fruit and vegetable growers a comprehensive web tool that would answer their food safety questions, links to other food safety websites and information, and provide access to important documents, forms, and reports. In addition to existing website resources found on the internet there was also some original content created to make the web tool user friendly and easy to navigate.

   Design and Programming of the Web Tool by TMA

   Once the packet of information was finalized, the next step was to provide this information to the web design team at Thomas Marks and Associates + Peritus Design (TMA) in coordination with the DATCP Information Technology team. TMA is an advertising agency that has worked closely with the WPVGA for over 2 years. Most recently designing a consumer focused website and a trade focused website.

   The web tool developed has a focus on being "grower friendly" and easy to use with visual elements that appeal to food growers with an FAQ-style hierarchy designed for usability. All best practices for Information Architecture have been utilized. The user interface has been designed to reflect the look and feel that growers are accustomed to, while at the same time blending into the existing DATCP website. The Advisory Team (WPVGA and DATCP) worked directly with TMA to coordinate the user interface and make certain file transfers were successful.

3) *ONE-ON-ONE TECHNICAL ASSISTANCE:* The WPVGA in conjunction with the Department of Agriculture, Trade, and Consumer Protection conducted free food safety training at Coloma Farms, Inc. (Coloma, WI) and Schroeder Bros. Farms, Inc. (Antigo, WI).

   The training was conducted by food safety expert Larry Hood, Ph. D. and included a round table discussion and question and answer session followed by an interactive group tour of the production facilities at Coloma Farms, Inc. and Schroeder Bros. Farms, Inc. Food safety plans and current/future developments relating to the impact of food safety requirements were discussed.

   After the morning training sessions, Larry Hood made one-on-one grower visits in the afternoon each day.

4) *TRAIN THE TRAINER: (This portion was contracted out to the University of Wisconsin-Extension).* The primary focus of the train the trainer program was to provide education and resources for county based extension professionals. To accomplish this goal we developed a four-session, online webinar training series. Each session was developed to educate trainers about a specific aspect of food safety. We also encouraged extension agents to invite other individuals who might serve as a resource for this information to attend.

   The on-farm food safety webinar training was held in early March 2012 and included four 90 minute sessions. These sessions were interactive and allowed time for questions. Session topics and speaker biographies are included below:

   Session 1: Food Safety Essentials: An Overview of Good Agricultural Practices and How to Apply Them on Small Farms. Do you know what the USDA's Good Agricultural Practices (GAP) and Good Handling Practices (GHP) are and how produce growers can apply them? These standards encompass a broad array of ways growers can improve their on farm food safety. Join us to learn about how to apply these food safety principles in the areas of manure, irrigation, pest control and hygiene.

   Dr. Erin Silva is an Organic Production Scientist with the University of Wisconsin Department of Agronomy and Center for Integrated Agricultural Systems. She has conducted organic research both in New Mexico and Wisconsin, including projects involving no-till vegetable production and cover crop systems. Erin currently serves as co-facilitator of the Wisconsin Organic Advisory Council. As a graduate student, Erin cultivated an organic market garden and sold the produce at the local farmer's market.

   Session 2: Good Handling Practice Guidelines for Fresh Market Vegetables. Do you know how to help produce growers prevent food borne illness? To help these growers identify and manage potential pathogens, the USDA's has issued standards for Good Handling Practices (GHP). This presentation will introduce GHP guidelines for fresh

market vegetables and how to use them to minimize food borne food safety risks. Topics will include designing and building a washing and packing facility to minimize food safety risks, GHP guidelines on water, hand washing, pest control, cleaning and sanitizing, and record keeping. It will also include a list of resources available to growers.

John Hendrickson is an Outreach Specialist for the Center for Integrated Agricultural Systems at the University of Wisconsin in Madison. His work focuses on fresh market vegetable production and direct marketing. He also coordinates the Wisconsin School for Beginning Market Growers and is a vegetable farmer himself.

Session 3: Third Party Food Safety Audits: Details and Dilemmas. If a grower called and asked if they needed a food safety audit would you have an answer? There are different types of food safety audits and not all growers or buyers know what kind of audit they need. This presentation will help sort out the different types of audits, who really needs one and the right questions to ask both growers and buyers to save everyone time and money.

Elizabeth (Betsy) Bihn is a Senior Extension Associate in the Department of Food Science at Cornell University. She is currently the program coordinator for the National Good Agricultural Practices (GAPs) Program. The goal of the National GAPs Program is to reduce microbial risks to fresh fruits and vegetables by developing a comprehensive education and extension program for growers, farm workers, produce industry personnel, students, teachers, and consumers. Betsy received her B.S. from Ohio State University in zoology and her M.S. from the University of Florida in horticulture.

Session 4: Building a Food Safety Plan/GAP/GHP. What is a food safety plan and where should a grower start in putting one together? Food safety is important and a good food safety plan can help growers save both time and money during an audit. This presentation will explain what a food safety plan is and how to help growers find the resources for putting together a food safety plan that fits their needs.

Elizabeth (Betsy) Bihn (biography above)

5) **Resources Available through the Wisconsin Department of Agriculture Trade and Consumer Protection** This presentation also included an overview by **Teresa Engel** of the food safety resources available in Wisconsin through the Wisconsin Department of Agriculture Trade and Consumer protection.

On-farm food safety sessions were recorded and archived for future viewing. These sessions have also been converted to YouTube videos to increase the accessibility of the food safety information. Archived presentations are currently available through the On-Farm Food Safety blog page constructed for this program.
http://blogs.ces.uwex.edu/offsp/

In addition to the on-line training sessions, food safety resource kits were also provided to attendees and other individuals working with fruit and vegetable growers. These fifty resource kits were distributed to reinforce and further extend the knowledge gained in this training to fruit and vegetable producers and included the following resources:

- A "Food Safety Begins on the Farm" This is a presentation CD that trainers can use for speaking about food safety without creating a new presentation. This resource was provided to increase the ease and accuracy of providing food safety information to groups.

- "Fruits, Vegetables and Food Safety: Health and Hygiene on the Farm" DVD's. Each DVD has a version in English and either Hmong or Spanish to help teach good hygiene practices to farmers or farm laborers from a variety of backgrounds. This resource is available to fruit and vegetable growers through their county extension office. Growers may borrow or check out the DVD for use in training their farm laborers. It can also be used to train Spanish and Hmong speaking growers about utilizing good health and hygiene practices into their production practices.

- Multiple copies of "Food Safety Begins on the Farm: A Grower's Guide" in both English and Spanish. These guides are for distribution to fruit and vegetable growers in each county. This guide will assist growers in evaluating and minimizing their risks.

- "A Grower Self Assessment of Food Safety Risks". This tool will help growers interested in GAP certification evaluate their current food safety practices and their readiness for certification.

III. Goals and Outcomes Achieved:

PHASE ONE:

RECOMMENDATIONS AND IMPACT ANALYSIS

The recommendations that follow are intended to meet the following goals:

- Assist the Wisconsin Fresh Fruit and Vegetable Industry in meeting market demands for food safety.
- Enhance the competitiveness of Wisconsin fresh fruit and vegetable producers.
- Meet the needs identified in assessment phase of this project.
- Include tools, standards, and/or practices that adhere to federal level regulations and meet the needs of producers, food safety experts, and buyers.

These recommendations address the identified needs and will benefit small, diversified growers, commercial growers, and buyers within the state. They are organized as a new strategy to be explored and as tools and tactics to be continued and expanded upon.

A NEW STRATEGY TO BE EXPLORED

- Recommendation One: Explore the establishment of a Wisconsin Produce Innovation Center, from identifying produce market needs across the supply chain to piloting one-on-one technical assistance and/or a grower hotline.

TOOLS AND TACTICS TO BE CONTINUED, CREATED OR EXPANDED UPON:

- Recommendation Two: Develop and promote a webbased tool to assist Wisconsin fruit and vegetable growers in learning about food safety, from "Why should I be concerned?" to "What are best practices?" to becoming GAP/GHP-certified for food safety.
- Recommendation Three: Create pamphlets and educational materials that inform growers and buyers about specific on-farm food safety risks and how they can mitigate the risks. Develop an outreach and communications plan to promote and disseminate the materials.
- Recommendation Four: Continue existing and implement new education and training programs to relay technical information and best practices to growers using direct and "train the trainer" education for agricultural professionals. Further explore how to engage buyers in training and education efforts at levels where interest was indicated (i.e., buying and giving growers a foodsafety manual and hosting/presenting at a grower workshop).
- Recommendation Five: Continue to offer and promote a cost-sharing program for GAP/GHP food safety certification.

PHASE TWO:

1) *WORKSHOPS:*
   Summary of Larger Grower Workshops

   Tuesday, April 5, 2011: 1-5 p.m. – Hancock Agriculture Research Station, Hancock
   - Address: N3909, County Rd. V, Hancock, WI 54943
   - Attendees: 18. Several major potato and vegetable growers attended this training. Okray Family Farms, RPE, Inc., Nuto Farms, Heartland Farms, Mortenson Bros., Wallendal Supply, Bushmans', Inc and others. These growers represent a substantial number of potato and vegetable acres.
   - Presenters: Larry Hood and Perry Engel (Tim Feit helped facilitate the meeting)

   Thursday, April 7, 2011: 1-5 p.m. – WPVGA office, Antigo
   - Address: 700 5th Ave. (third floor), Antigo, WI 54409
   - Attendees: 6. Potato and vegetable growers included Cedar River Potato Company, Baginski Farms, Hyland Lakes, Igl Farms, and Schroeder Brothers Farms, Inc. Attendance was down more than would normally be expected due to the fact that a large number of growers are potato seed farmers that were busy shipping seed potatoes.
   - Presenters: Larry Hood and Perry Engel (Tim Feit helped facilitate the meeting)

Summary of Smaller Growers Workshop

Friday, March 25, 2011: 9-2 p.m. – Rice Lake
- Location: UW Barron County – Ritzinger Hall
- Attendees: 9.
- Presenters: Steve Ingham and Perry Engel.

Monday, April 4, 2011: 1-5 p.m. – Viroqua
- Location: Western Technical College
- Address: 220 South Main Street, Virocqua, WI 54665
- Attendees: 20. Several of the growers attending the workshop were from organic vegetable farms.
- Presenters: Steve Ingham, Larry Hood, and Perry Engel. (Tim Feit helped facilitate the meeting)

Wednesday, April 6, 2011: 12-4 p.m. – Oconomowoc
- Location: Oconomowoc Lake Club
- Address: 4668 Lake Club Circle, Oconomowoc, WI 53066
- Attendees: 8. This workshop was attended by a relatively small group of people, but the discussion and Q & A was excellent. The attendees were motivated to learn about food safety issues and asked several questions.
- Presenters: Steve Ingham, Larry Hood, and Perry Engel. (Tim Feit helped facilitate the meeting)

Friday, April 15, 2011: 11:30 a.m.-4 p.m. - Green Bay
- Location: Northeast Wisconsin Technical College
- Address: 2740 West Mason Street, Green Bay, WI 54307
- Attendees: 17. This group was also very interested in learning about food safety as it relates to their individual businesses. Lively interaction and thoughtful questions showed the importance the attendees placed on the training topic.
- Presenters: Jill Ball and Perry Engel. (Tim Feit helped facilitate the meeting)

2) *WEB-TOOL:* Summary of Benefits of the Web Tool

- A starting point for growers seeking answers to basic food safety questions.
- Advanced information covering third-party certification and the audit process.
- Critical links to food safety information, including links to Universities, government sites, and industry organizations.
- Sample food safety plans.
- Templates for the creation of Standard Operating Procedures documents, food safety audits, and food safety checklists.
- A concise list of resources and funding opportunities available to growers.

http://datcp.wi.gov/OnFarmFoodSafety/index.aspx

3) *ONE-ON-ONE TECHNICAL ASSISTANCE:*

After the morning training sessions, Larry Hood made one-on-one grower visits in the afternoon each day. The following is a summary of these visits.

August 9th:

- Heath Farm (Coloma, WI) – Eva Nolan (This farm grows zucchini, green peppers, and other vegetables)
- Heartland Farms (Hancock, WI) – Jeremie Pavelski and Alicia Williams (Wisconsin's largest chipping potato grower)
- Mortenson Bros. Farms (Plainfield, WI) – Pat Althoft and Renee Noonan (Processing potatoes for McCain Foods)

August 10th:

- Okray Family Farms (Plover, WI) – Dick Okray (one of Wisconsin's largest grower/packer/shipper of fresh market potatoes)

Attendee List

August 9th at Coloma Farms:

1. Jeremie Pavelski – Heartland Farms, Inc.
2. Alicia Williams – Heartland Farms, Inc.
3. Thomas Leiler – Shiprock Farms
4. Ken Schroeder – P&R Packing
5. Carol Burza – RPE
6. Pat Althoft – Mortenson Bros. Farms
7. Renee Noonan – Mortenson Bros. Farms
8. Eva Nolan – Heath Farm
9. Andy Diercks – Coloma Farms, Inc.
10. Tim Feit – Wisconsin Potato & Vegetable Growers Association
11. Larry Hood, Ph.D. – Technical and Business Services, LLC

August 10th at Schroeder Bros. Farms:

1. Pete Schroeder – Schroeder Bros. Farms
2. Crystal Olson - Coloma Farms, Inc.
3. Mike Baginski – Ted Baginski & Sons, Inc.
4. Brad Igl – Igl Farms, Inc.
5. Tim Feit – Wisconsin Potato & Vegetable Growers Association
6. Larry Hood, Ph.D. – Technical and Business Services, LLC

Agenda for both days of training

9 a.m. - 9:15 a.m.: Introductions and brief overview of the tour/training. Hand out food safety information, articles, and sample documents.

9:15 a.m. - 9:30 a.m.: Representative from Coloma Farms/Schroeder Bros. Farms will give a brief overview of some of the upgrades they've made to their facilities, the food

safety audits that they participate in, along with the history behind their companies - how long they've been farming, acres, changes to their facilities over time and the evolution of their food safety controls.

9:30 a.m. – 11:00 a.m.: Facility tour that will include interaction with growers using the facility to illustrate the controls that need to be included in food safety plans, point out areas that are set up in accordance with good food safety practices and areas that could be improved.

11:00 a.m. – 11:45 a.m.: Question and answer session

11:45 a.m. – noon: Larry Hood will give a short talk on the steps growers will need to take to stay ahead of the curve regarding food safety requirements (Food Safety Modernization Act, audits, etc.)

1 p.m. – 4 p.m.: Tour other local potato farming operations

4) *TRAIN THE TRAINER:* The four session series attracted a wide array of extension professionals from the agriculture, community and natural resource development and nutrition program areas. Other agricultural service providers including technical college instructors, university based specialists and local food advocates. Attendance for individual sessions ranged from 9 – 27 with the highest number of participants in the "Good Handling Practices" session with John Hendrickson. The total number of participants for all four sessions was 71.

- "On-Farm Food Safety Train the Trainer" sessions have been archived and are available for future viewing. The link to this site has been distributed to UW-Extension staff throughout the state. We have also encouraged extension personnel to forward the link and information about the program to other farm resource professionals in their county.

- "On-Farm Food Safety" archived presentations have been converted to YouTube videos to increase accessibility of the information and make them easier to view.

- Fifty food safety resource kits were distributed to program attendees and other counties based of fruit and vegetable production. In addition to encouraging recipients to utilize the materials, we have also asked that they inform fruit and vegetable growers in their counties of the resources available through their offices.

IV. Lessons Learned:

- The demand for on-farm food safety resources, workshops, and information remains high.
- There are different needs for farms depending on size, number of crops grown, and markets.
- The web-tool and interactive workshops were well received.

V. Outcome Measures:

All listed in "goals and outcomes achieved" section.

VI. Additional Information:

Maps and publications already included in other sections

VII. Project Contact:

Teresa Engel
DATCP Agricultural Development
teresa.engel@wi.gov
608-224-5101

Grant #: FY08-003

FY08 – SCBG
Final Progress Report

Grantee: Department of Agriculture, Trade and Consumer Protection

Project Title: Survey of viruses occurring on snap beans in Wisconsin

Total Amount Received: $22,000

Date of Award: 4/1/09 – 2/28/10

Project Contacts: Adrian Barta,

I. Project Summary

The widespread occurrence of soybean aphid (first officially recognized in Wisconsin fields in 2000) provided a significant challenge to snap bean producers, due to the ability of the aphid to vector a wide range of plant viruses. Snap beans are highly susceptible to viral infections. Growers have reported considerable yield and quality loss due to virus infection. To help combat this problem, this project conducted a survey for various viruses in snap bean fields in the state. The survey included documenting field observations of aphid and other possible vectors. This project assisted in establishing a picture of the incidence of various viruses on snap bean crop in the state. Accurate knowledge of virus incidence and vector prevalence will guide participating producers in management decisions and enhance IPM practices.

II. Project Approach:

Survey and detection: During the 2009 field season, the WI DATCP Plant Industry Bureau Pest Survey program and the Plant Industry Bureau Laboratory worked in cooperation with three vegetable processing companies and several fresh market green bean growers to test for the presence of several viruses in the state snap bean fields. Field staff, using field maps provided by the growers, collected leaf samples and symptom observations from fields at approximately 48 days post-planting. Sampling was conducted from July 6 to Aug 13, 2009.

Leaf samples were then tested by the Plant Industry Laboratory for the incidence of several plant viruses, including alfalfa mosaic virus (AMV), bean pod mottle virus (BPMV), cucumber mosaic virus (CMV) and for members of the potyvirus family. Laboratory techniques employed included reverse-transcription polymerase chain reaction (RT-PCR) for AMV and enzyme-linked immunosorbent assay (ELISA) for BPMV, CMV and the potyvirus group.

Results: A total of 101 fields were sampled for viruses. Of that number, seven were positive for AMV, four were positive for CMV, two were positive for potyvirus, and 88 fields did not yield evidence of virus infection.

Information on the prevalence of the various viruses on snap beans in the state will be used by growers to guide future pest control activities (vector management) and to assist in making appropriate variety selections for host resistance.

III. Goals and Outcomes Achieved:

All assessment goals were achieved. See Section 2 for details and map on next page.

Public and Grower Outreach: Results of the survey and laboratory analysis were shared with growers and the public through publication of results in the DATCP *Wisconsin Pest Bulletin* (Vol. 54 No. 19, 11/20/2009), also available on the Bulletin web site; distribution at the HALTVIK (Upper Midwest Processing Crops producer group) meeting in September; and in a presentation by Anette Phibbs (PIB Laboratory Director) at the Wisconsin Crop Management Conference, January 13, 2010.

IV. Lessons Learned:

Support and cooperation from the various grower communities exceeded expectations, with growers even offering to collect samples for the survey. (All such offers were declined, to assure adherence to field sampling protocols.) Performance goals for sampling, testing and publicizing were met.

V. Outcome Measures:

1. Sample 200 fields: 101 were sampled

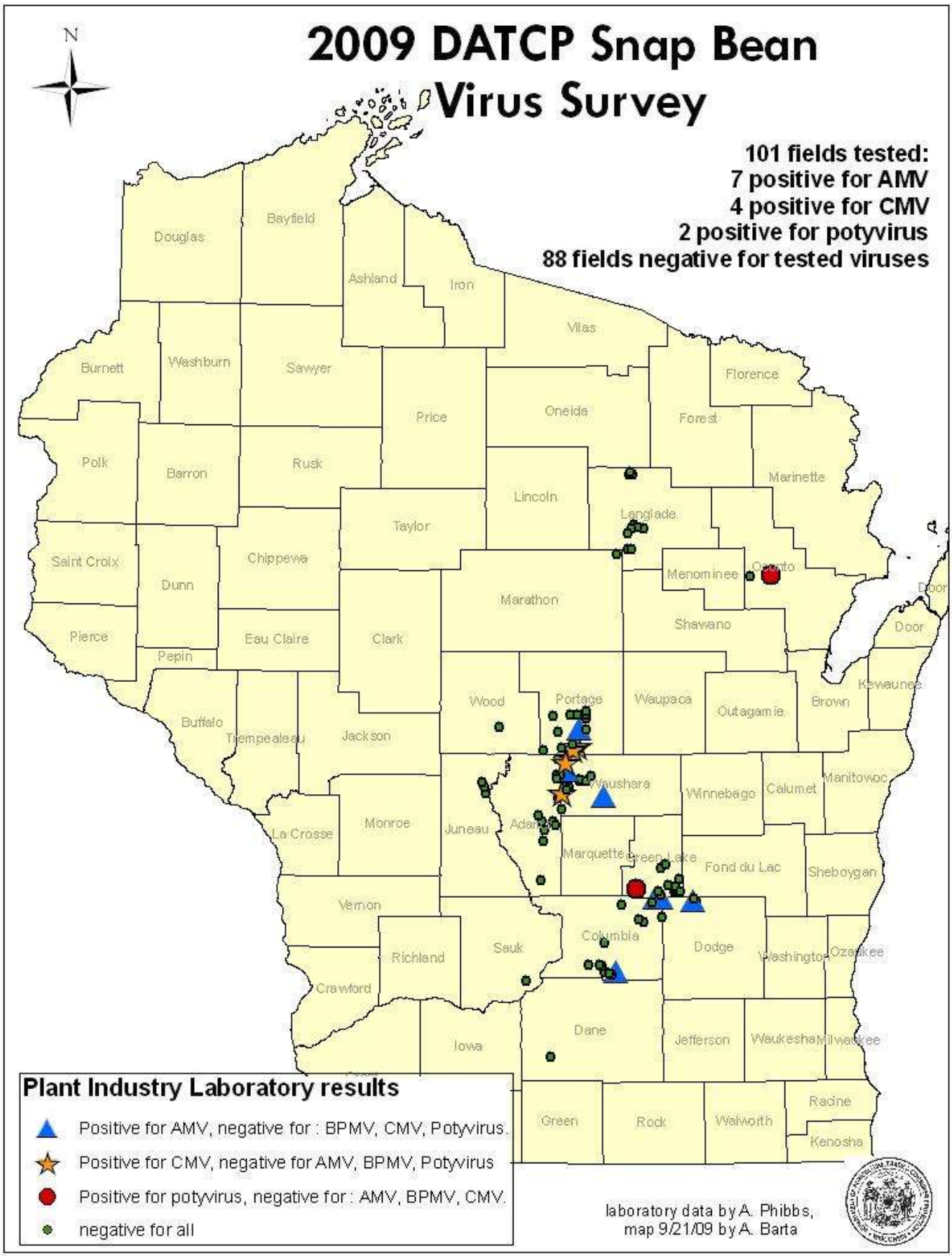
2. Work with 30 fresh market growers: Unknown number because were contracted by processors but confident that met the outcome measure and provided validity to the study.

3. Work with 3 processor companies: 3 companies

4. Report examining the incidence of viruses in sampled fields, and an analysis of any possible correlation between aphid numbers and virus incidence, including mapping of virus incidence. Report will be shared with UW Extension, for incorporation into management recommendations. Samples will be screened for a minimum of four viruses: Samples were screened for viruses and reports were given. See Sections 2 and 3 for results and dissemination of information.

5. Publication of results in industry (both processing and fresh market, conventional and organic), DATCP and UW periodicals aimed at vegetable growers in the state (4-6 articles): See Section 3 for results dissemination.

6. Presentation of results to grower and processor meetings, at least two meetings: See Section 3 for results dissemination.


2009 DATCP Snap Bean Virus Survey
101 fields tested:
7 positive for AMV
4 positive for CMV
2 positive for potyvirus
88 fields negative for tested viruses
N
Douglas
Bayfield
Ashland
Iron
Vilas
Florence
Burnett
Washburn
Sawyer
Price
Oneida
Forest
Marinette
Polk
Barron
Rusk
Lincoln
Langlade
Taylor
Saint Croix
Dunn
Chippewa
Menominee
Oconto
Door
Marathon
Shawano
Pierce
Pepin
Eau Claire
Clark
Wood
Portage
Waupaca
Outagamie
Brown
Kewaunee
Buffalo
Trempealeau
Jackson
Waushara
Winnebago
Calumet
Manitowoc
La Crosse
Monroe
Juneau
Adams
Marquette
Green Lake
Fond du Lac
Sheboygan
Vernon
Columbia
Dodge
Washington
Ozaukee
Richland
Sauk
Crawford
Dane
Jefferson
Waukesha
Milwaukee
Iowa
Green
Rock
Walworth
Racine
Kenosha
Plant Industry Laboratory results
Positive for AMV, negative for : BPMV, CMV, Potyvirus.
Positive for CMV, negative for AMV, BPMV, Potyvirus
Positive for potyvirus, negative for : AMV, BPMV, CMV.
negative for all
laboratory data by A. Phibbs,
map 9/21/09 by A. Barta

VI. Additional Information:

Maps and publications already included in above sections**.** See attachment for Extension bulletin created from this project.

VII. Project Contact:

Adrian Barta
DATCP Agricultural Resource Managment
adrian.barta@wi.gov
608-224-4592

Grant #: FY08-004

FY08 – SCBG
Final Progress Report

Grantee: Department of Agriculture, Trade and Consumer Protection

Project Title: Survey for Corky Ringspot Disease of Potatoes in Wisconsin.

Total Amount Received: $10,000

Date of Award: 4/1/09 – 2/28/10

Project Contacts: Anette Phibbs, DATCP PIB LAB

I. Project Summary

Wisconsin's potato growers rank third in the nation with a 2006 crop valued at $232 million, according to data compiled by the Wisconsin Agricultural Statistics Service. In 2007, Corky Ringspot Disease was found for the first time in Wisconsin, in two fields. The brown spots and arcs of the tuber necrosis resulted in the rejection of the harvest from these fields by processors, for a total crop loss. This tuber necrosis is caused by tobacco rattle virus (TRV) and is transmitted by nematodes that are common in Wisconsin. The disease cannot be identified in the field but requires molecular testing in a laboratory. To assess the current threat of this disease, the Plant Industry Bureau conducted a delimiting survey and testing for TRV to identify the scale of the problem in Wisconsin. Results were reported to participating producers and the potato-growing industry to assist with integrated pest management practices (IPM). State wide maps of Corky Ringspot Disease distribution were made available to producers via industry publications and DATCP website.

II. Project Approach:

DATCP Fruit & Vegetable Inspectors and Plant Industry Bureau Inspectors collected a total of 150 potato tuber samples from 14 counties in 2009. Tubers were sampled from fields at fall harvest and from storage facilities during the spring and late fall. Nineteen potato producers voluntarily participated in the survey. Eleven of these growers produce potatoes for seed. The 14 sampled counties represent the major potato growing areas of the state. Please refer to the map and table for the number of samples collected in each county.

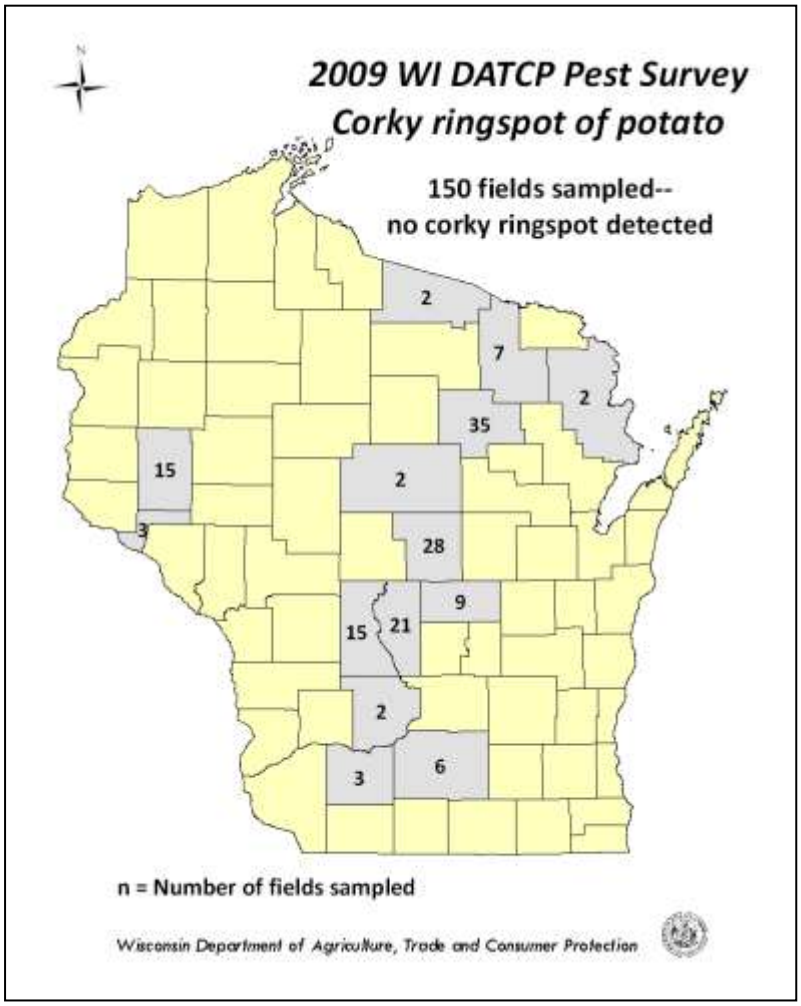
All 150 potato samples were processed and tested for tobacco rattle virus (TRV) at DATCP's Plant Industry Laboratory utilizing the very sensitive and effective laboratory methods (RT-PCR, reverse transcription polymerase chain reaction). No TRV, the virus causing corky ringspot disease in potatoes, was detected in any of the collected tubers. Examination of tubers for internal necrosis symptoms did not reveal any strong indications of TRV infections either. In

2009 we did not receive any reports from growers or researchers regarding likely TRV finds in 2009. Further sampling and testing will be conducted in 2010 to screen more fields for this disease.

III. Goals and Outcomes Achieved:

Public Outreach – Public Outreach – All producers participating in the survey were notified by mail, and provided with their individual test results including information about field locations and potato varieties tested. A fact sheet about corky ringspot disease produced by DATCP Plant Pathologists and has been distributed to all participating growers. Plant Industry Lab staff presented a survey summary at the 2010 Crop Management Conference in Madison and the 2010 Wisconsin Seed Potato Improvement Association meeting in Antigo. The session at the Crop Management Conference was attended by an estimated 150 Ag professionals and an abstract was published in the proceedings

http://www.soils.wisc.edu/extension/wcmc/proc/2010_wcmc_proc.pdf



Corky Ringspot Disease Survey 2009	
County	No of Fields Sampled
Adams	21
Dane	6
Dunn	15
Forest	7
Iowa	3
Juneau	15
Langlade	35
Marathon	2
Marinette	2
Pepin	3
Portage	28
Sauk	2
Vilas	2
Waushara	9
Total	150

The Wisconsin Seed Potato Improvement Association meeting was attended by approximately 50 seed potato growers. A copy of the powerpoint presentation is available on the pest survey website

http://pestsurvey.wi.gov/program/pdf/powerpoint/Potato-PdScab-TRV2010.pps.

The Corky Ringspot fact sheet is available on the DATCP website, http://pestsurvey.wi.gov/plantdisease/pdf/potato/PotatoTRVfactsheet.pdf

This information provided about the status of Corky Ringspot Disease to individual growers is essential for these operations to formulated disease management plans for individual farms. Survey summaries providing information about disease status on county by county bases can now also be utilized by all potato growers to guide their crop management strategies. The discovery of a disease new to an area can have a long term affect on the potato growing industry as whole. Delimiting a disease to certain areas is equally important in facilitating an appropriate response including attempts to eradicate or preventing the spread of this disease.

The sampling, testing and outreach efforts met our performance goals for 2009.

IV. Lessons Learned:

Spring testing of seed potatoes was limited because of time limitations due to funding approval. In April and May, DATCP staff focused on contacting producers and training seasonal laboratory personnel. Target sample numbers were reached during fall sampling. We did not anticipate that our project would be affected by budget timing but keep this in mind for future projects.

V. Outcome Measures:

1. Educational efforts aimed at increasing grower awareness of the disease and steps required to prevent further spread will be conducted through the existing grower organizations, including the Wisconsin Seed Potato Certification Program and the Wisconsin Potato and Vegetable Growers Association. The *Badger Common 'Tater'*, the publication of the WPVGA, has a circulation of 4,000. The editor has expressed an interest in receiving articles about the disease and the survey efforts. Presentations to both groups will reach all the seed producers, and several hundred of the commercial potato growers.
*See Section 3 for specific extent of publications and outreach completed for this outcome measure.

2. One hundred seed lots sampled and analyzed for TRV, supporting the field virus observations conducted by the Wisconsin Seed Potato Certification Program. This additional assurance of the quality of Wisconsin potatoes will enhance the marketability of both seed and table stock crops.

*Seed lots were sampled in the 14 major potato growing counties in the state with enough samples to sufficiently assess the threat of the virus. See Section 2 for more details.

3. Tubers sampled and analyzed from potato fields in the counties of Dunn, Barron, Rusk and Chippewa, with a goal of 50 fields. Results from the laboratory analysis will be used to inform any growers with a potential for crop loss of the need for management strategies aimed at assuring the production of quality tubers, including options such as variety selection, crop rotation choices and chemical use, as necessary.

*150 tubers were sampled and analyzed from 14 counties making the sample size and variance more than sufficient to successfully assess the current distribution of the virus. See Section 2 for more details.

VI. Additional Information:

Websites and maps already included in above sections.

VII. Project Contact:

Anette Phibbs,
DATCP PIB LAB
Annette.phibbs@wi.gov
608-266-7132

Grant #: FY08-005

FY08 – SCBG
Final Progress Report

Grantee: Department of Agriculture, Trade and Consumer Protection

Project Title: Savor Wisconsin

Total Amount Received: $10,094.64

Date of Award: 4/1/09 – 9/30/11

Project Contacts: Nicole Breunig

I. Project Summary:

This project was a direct response by WI Department of Agriculture, Trade & Consumer Protection to requests received from both consumers and wholesale food buyers requesting assistance in locating Wisconsin grown foods. Additionally, this project aligned with the State's goal of having 10% of Wisconsin food expenditures for locally grown foods as part of a "buy local" initiative. Furthermore, this project offered a unique opportunity for specialty crop producers to expand their markets online by enhancing the free marketing tools available to current and newly specialty crop producers listed on SavorWisconsin.com. By offering free online marketing tool through this project, Wisconsin's specialty crop producers did not need to invest in developing their own individual websites and online presence.

As the most comprehensive agricultural website in Wisconsin, SavorWisconsin.com met the needs for helping buyers 'buy local' from Wisconsin's specialty crop producers. This project facilitated optimizing the SavorWisconsin.com website by funding a staff assistant to work to accomplish the below purposes of this project:

• Increase the number and improve the accuracy of specialty crop producer profiles and farmer's market listings on SavorWisconsin.com and
• Increase relevant traffic to the SavorWisconsin.com website, especially for key specialty crops.

DATCP also worked actively to promote key specialty crop industries on the site's homepage as part of this project. The funds reinstated a public relations consultant to work with specialty crop groups to develop key industry articles featured on the SavorWisconsin.com homepage. Grant funds also cover the IT costs of loading these articles, the implementation of social media bookmarks.

Increasing the prominence of Specialty Crops on the homepage increased traffic to SavorWisconsin.com and improved consumer searches regarding the featured crop and products. The end result was an increased awareness and ultimately increased purchases for Wisconsin's specialty crop producers.

This project built on previous work accomplished through funding from the USDA Specialty Crop Block Grant. SavorWisconsin.com was originally developed through a USDA Specialty Crop Block Grant that was made to the Wisconsin Apple Growers Association in 2003. Since that time, tactics to promote Wisconsin's specialty crops have been enhanced to improve the utility of the site, largely through funding from additional Specialty Crop Block Grants. As the website has over 1,500 specialty crop profiles at the close of fiscal year 2010, these different producers were all available for consumers to connection with. Therefore, this project allowed Wisconsin specialty crop producers to benefit from this investment and access consumers using current technology and resources.

II. Project Approach:

The work plan as presented in the 2008 Specialty Crop Block Grant proposal was accomplished and covered the following items: Purchase of IT Business & Technical Guidance Support Service Package and site optimization from web development agency, Skyline Technologies, Inc in July of 2009; Reinstatement of part-time staff to manage the project in April of 2009; and increase in specialty crop producer listings on SavorWisconsin.com through continued population of specialty crop producers into the SavorWisconsin.com website beginning in April of 2009, as well as online promotion by placing advertisements in five widely distributed Wisconsin Farm Fresh Atlases to aid in recruitment of new listings. Additionally, an email blast was sent out in August of 2009 requesting the 1,300 producers with emails in their profiles to update their listings. This led to a 25% response in updating listings within 2 weeks. Since accurate site content is critical for ensuring optimal traffic from search engines, this tactic is crucial to the success of the site in promoting Wisconsin's specialty crop producers.

In October 2009 we implemented social media bookmarks which are the first step in positioning the site to build awareness through social networking. Furthermore, initials steps are being done to incorporate a sign-up for visitors to sign-up to receive updates about the website and listings directly to their email with links back to the site. There are 285 bookmarks available through the standard 'add this' tool bar. This opportunity was the most feasible option with the idea that the diversity of bookmarks available. It has helped us gauge the social media avenues that this site user is on. Currently are top performing bookmarks are Facebook, Add to Favorites, Email, Print, Twitter and Google.

Through 2010, the site content was continually updated to education about different specialty crops and the impact of those industries. Additionally, these product features provided direct links for visitors to find listing of these products on SavorWisconsin.com. Features included Farmer's Markets/Herbs, April 2010; Spinach/Asparagus,May 2010; Strawberries, June 2010; Cherries, July 2010 Cranberries, August 2010; Apples/Sweet Corn, September 2010

III. Goals and Outcomes Achieved:

Because the of project work noted in section II, two overall goals of the DATCP WI Specialty Crop Block grant program. These goals were:

1) To increase awareness of Wisconsin's Specialty Crop producers among Wisconsin's consumer and wholesale food buyers. Wisconsin's specialty crop industries will benefit

from this online marketing activity through increased contacts to their producer profiles and place of business.

2) Provide free online marketing resulting in $270,000 in savings for Wisconsin specialty crop producers.

Both of these goals were achieved as the website has over 1,500 specialty crop profiles at the close of fiscal year 2010, an increase of over 200 producers. This surpassed the goal of 60 new profiles in order to reach the $270,000in free marketing services provided.

IV. Lessons Learned:

Because the internet and social media are continuing to change, we has to research and best understand which tactics would be most beneficial to the consumer and site visitors. Also utilizing information and responses from the social media bookmarks to expand the opportunities we are providing visitors to interact with the site and producers on it has been a learn curve that will provide us other future opportunities. This will build on new trends and techniques in web development with a look at impact and potential relevance to the web user.

V. Outcome Measures:

The measurable outcomes for this project were by December, 2010 to accomplish the following:

- Increase traffic by increasing calendar year 2010 page views +10% to 1,168,928
  2010 page views were at 1,261,327 views, exceeding the goals

- Increase number of vegetable listings +10% from 429 to 472
  By the close of 2010 the number of vegetable listings reached 500

- Increase number of fruit listings +10% from 369 to 406
  At the close of 2010 the number of fruit listings reached 425

VI. Additional Information:

Provide additional information available (i.e. publications, websites, photographs) that is not applicable to any of the prior sections.

VII. Project Contact:

Nicole Breunig
WDATCP
nicole.breunig@wi.gov
608-224-5080

Wisconsin Specialty Crop Block Grant FY08

Grantee	*Amount Awarded*	*Amount Reimbursed*	*Amount Available*
DATCP – Christmas Trees	$ 10,000	$ 10,000	$ 0
DATCP – Food Safety	$ 78,896.37	$ 78,896.37	$ 0
DATCP – Snap Beans	$ 22,000	$ 22,000	$ 0
DATCP - Potato Virus	$ 10,000	$ 10,000	$ 0
DATCP - Savor Wisconsin	$ 10,094.64	$ 10,094.64	$ 0
Administrative Fees	$ 13,099. 72	$ 13,099. 72	$ 0
.			
TOTAL AWARDED	$ 144,090.73		
TOTAL REIMBURSED		$ 144,090.73	
TOTAL FUNDS REMAINING			$ 0.00

Total FY08- Funds Awarded to Wisconsin:
$144,090.73
Total Funds Awarded to Wisconsin Grantees:
$ 130,991.01
Funds used by DATCP for Administrative Purposes: $13,099.72